

REMARKS

In response to the non-final office action of May 31, 2006, the applicant asks that all claims be allowed in view of the amendment to the claims and the following remarks.

Claims 14, 16-18, 20, 22-25, 28-30, 32 and 34-36 are currently pending, of which claims 14, 22, 25, 28 and 34 are independent. Claims 14, 25 and 28 have been amended. Support for the amendments may be found, for example, in the application at page 6, lines 22-28; page 13, lines 5-7; and Fig. 5. No new matter has been introduced.

In the action, claims 14, 16-18, 20, 22-25, 28-30, 32 and 34-40 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Motoyama (U.S. Patent No. 6,009,436) in view of Gajraj (U.S. Patent Application Publication No. 2002/0002566). The applicant respectfully traverses the rejections and requests reconsideration in view of the amendments to the claims and the following remarks.

Claims 14, 25, and 28.

As amended, claim 14 recites comparing two document type definitions (DTDs)—a first DTD and a target DTD—with one another to identify common patterns, and using the common patterns identified by comparing the first and target DTDs with one another to map without user intervention elements and sub-elements of the first DTD in the first source document to recode a document according to the target DTD. Neither Motoyama nor Gajraj disclose this feature.

As noted by the action, Motoyama does not disclose identifying patterns common within documents by identifying common elements between DTDs. See action at page 3, lines 7-8. For this feature, the action relies on Gajraj's disclosure of "finding elements in both DTD documents corresponding to a common base class." See action at page 3, lines 9-11 (citing Gajraj ¶¶ [0015-0017, 0024]).

More particularly, Gajraj's transformation tool uses a mark-up language architecture to (1) determine "to what class of element an element in the first document belongs, from the first document type definition" and (2) determine "for that class, at least one corresponding element in the second document type definition." See Gajraj at ¶¶ [0015-0016]; see also Fig. 1 (showing a meta-DTD 50 that is a base class for DTD A 60 and DTD B 70, document instance A 80 that is of the type defined in DTD A, and document instance B 90 that is of the type defined in DTD B)

and Abstract. As such, Gajraj discloses a transformation technology that, *inter alia*, determines an element class to which an element in first document belongs and determines a corresponding element in a second document type definition for the determined element class.

Gajraj provides an example transformation process in which "docA" is a document conforming to "DTD A" and is transformed using an architecture to "docB," which is a document conforming to "DTD B." See Gajraj at ¶ [0081]. In particular, Gajraj's process receives the DTD A, the DTD B and the architecture to which the DTDs A and B are compared. See Gajraj at ¶ [0082]. Gajraj then finds all elements in DTD A and the corresponding "architecture forms" of each element in DTD A. See Gajraj at ¶ [0083]. Next, Gajraj finds all elements in DTD B and the corresponding "architecture forms" of each element in DTD B. See Gajraj at ¶ [0084]. Gajraj then iteratively processes each element in docA and begins by reading an element in docA. See Gajraj at ¶ [0085]. Gajraj's process next uses the identified "architecture forms" that correspond to elements in DTD A to find corresponding elements in the DTD B. See Gajraj at ¶ [0086]. If more than one match is found, user input is obtained to resolve the conflict. See Gajraj at ¶ [0087]. Then Gajraj's process maps the element in docA to the element in the DTD B, and repeats the process for the remaining elements in docA. See Gajraj at ¶ [0088]. After all docA elements have been processed, Gajraj then outputs the transformed docB. See Gajraj at ¶ [0089]. As such, Gajraj compares the elements in DTD A to the architecture forms, which are then compared to the elements in DTD B.

Gajraj identifies a benefit of this process -- namely, that a single transformation tool is able to transform *n* documents, which otherwise would require *n* transformation tools. See Gajraj at ¶ [0090]. See also Gajraj at ¶¶ [0059, 0070] (indicating an advantage provided by Gajraj's technology is that interchange of documents which conform to the architecture can occur without necessarily predefining the content models of the documents to be interchanged).

Even assuming for the sake of argument only that Gajraj's transformation process can be said to include identifying patterns common within documents by identifying common elements between document DTDs (as suggested by the action), Gajraj does so using a process that is different from that recited in amended claim 14, which requires comparing two DTDs -- a first DTD and a target DTD -- with one another to identify common patterns. As noted above, Gajraj

uses an element class of an architecture to transform an element in a first document to a corresponding element in a second document type definition for the determined element class, and, hence, Gajraj does not compare two DTDs with one another to identify common patterns, as recited by amended claim 14.

Thus, Gajraj does not describe or suggest comparing DTDs -- a first DTD and a target DTD -- with one another to identify common patterns, and using the common patterns identified by comparing the first and target DTDs with one another to map without user intervention elements and sub-elements of the first DTD in the first source document to recode so as to recode a document according to the target DTD, as recited in amended claim 14. Therefore, Gajraj does not remedy the failure of Motoyama to describe or suggest the subject matter of claim 14.

Accordingly, neither Motoyama, Gajraj, nor any proper combination of the two references, describe or suggest comparing two DTDs -- a first DTD and a target DTD -- with one another to identify common patterns, and using the common patterns identified by comparing the first and target DTDs with one another to map without user intervention elements and sub-elements of the first DTD in the first source document to recode a document according to the target DTD, as recited in claim 14.

For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 14 and claims 16-18 and 20, which depend directly or indirectly from claim 14.

Corresponding features are recited in independent claims 25 and 28, which each have been amended with amendments corresponding to those made to claim 14. These features are recited in independent claim 25 in this way: "compare the first and the target document type definitions with one another to identify common patterns" and "use the common patterns identified by comparing the first and the target document type definitions with one another to map without user intervention elements and sub-elements in the first document type definition of the first source document to recode the first source document according to the target document type definition to equivalent elements and sub-elements."

These features are recited in independent claim 28 in this way: "a computer processor configured by a mapping program to identify patterns common to the source document and the set of source documents by comparing the first document type definition and the target document type definition with one another and map, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, wherein to identify patterns includes to identify an element that is common to the first and second source documents but has a different name in the first source document than in the second source document and wherein to map elements includes to map a first element in the first source document to a second element in the second source document based on the identified common patterns." Claim 28 recites automatic mapping in the mapping program that configures the computer processor "to identify patterns ... and map elements ... to equivalent elements ...," i.e., to do so without user intervention.

For the reasons noted above with respect to independent claim 14, applicant respectfully requests reconsideration and withdrawal of the rejection of claims 25 and 28, and their respective dependent claims.

Claims 22 and 34.

Independent claims 22 and 34 each are directed to converting the format of a source document to the format of a set of source documents. Claims 22 and 34 each recite identifying patterns common to the source document and the set of source documents. As noted above with respect to claim 14 and also as noted by the action with respect to claim 22, Motoyama does not disclose identifying patterns common within documents by identifying common elements between document DTDs, see action at page 6, lines 10-11, and the action again relies on Gajraj's disclosure of "finding elements in both DTD documents corresponding to a common base class" for this feature, see action at page 6, lines 12-14 (citing Gajraj ¶¶ [0015-0017, 0024].

As described above with respect to claim 14, Gajraj uses an element class to transform an element in a first document to a corresponding element in a second DTD for the determined element class. Hence, Gajraj does not describe or suggest identifying patterns common to the source document and the set of source documents, as recited by claims 25 and 34. Accordingly, neither Motoyama, Gajraj, nor any proper combination of the two references, describe or suggest

identifying patterns common to the source document and the set of source documents, as recited by claims 25 and 34.

For at least these reasons, applicant respectfully requests reconsideration and withdrawal of the rejection of claims 25 and 34, and their respective dependent claims.

Conclusion

Applicant submits that all claims are in condition for allowance.


Applicant believes that all of the pending claims issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Pursuant to 37 CFR §1.136, applicant hereby petitions that the period for response to the action dated August 31, 2006, be extended for one month to and including September 30, 2006.

The fee in the amount of \$120 in payment for the Petition for Extension of Time fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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